

REMARKS

The present amendment is responsive to the Office Action dated October 8, 2003.

The Examiner has indicated in the Action that Claims 1-6, 8-10, 12-17 and 19-22 are readable on the elected species of Group I, and that Claims 7, 11 and 18 are readable on the non-elected species (Group II). The Action however indicates that Claim 11 (Group II) is not withdrawn from further consideration, being dependent upon or otherwise including the limitations of an allowed generic claim.

Claims 7 and 18 are withdrawn as being readable on the non-elected species of Group II. Claims 1-6, 8-10, 12-17 and 19-21 are readable on the elected species of Group I.

Regarding the proposed minor claim changes in the Action, Applicant has made the suggested changes in various claims, except for Claims 6, 8 and 21, for the reason that a generally flat surface may be utilized in some applications. In accordance with the Examiner's requirement, Applicants specifically traverses the requirement with respect to Claims 6, 8 and 21.

Certain claims have been amended, primarily to better define the invention with clarity.

Claims 2 through 6, as amended, are believed to define novel subject matter not anticipated or suggested by the prior art, and are believed to be allowable.

Claims 16 and 20, indicated to be allowable in independent form, have been placed in independent form, and are believed to be allowable.

New Claims 23 and 24 have been added, these claims depending respectively from Claims 1 and 8. These claims are urged to be allowable with their parent claims.

Claims 1, 4-6, 14 and 15 were rejected under Sec. 102 on Munz '269; Claims 1-4, 14, 15, 17 and 19 were rejected under Sec. 102 on von Bernuth et al '033; Claim 21 was rejected under Sec. 103 on Munz; and Claim 22 was rejected under Sec. 103 on von Bernuth et al and Munz.

Applicants' claimed arrangement enables rapid sprinkler nozzle insertions in the field. A person can readily carry a number of low-cost nozzles, and simply pop in an appropriate nozzle during installation to provide a desired spray pattern. Nothing relevant to this advantage and feature is suggested in the cited prior art or in the art known to Applicants. The cited prior art and art known to Applicants does not suggest a nozzle device having nozzle and reflector component edge portions to be quickly snapped into slots in a base. In the von Bernuth reference and other prior art, it would be quite labor intensive to effect such advantage in field installation. An inventory of a large quantity of nozzles would be many times as expensive than with Applicants' "pop-in" micro spray inserts.

The cited prior art, and the art known to Applicants, involve continuously directed flow or spray paths which produce heavy side sprays. That is, water is never free-spraying. This presents difficulties in achieving clean water patterns. In contrast, Applicants' claimed system differs in that a free spray or jet of prescribed shape is entirely free of impacting nozzle walls, and contacts a generally flat deflection surface.

Regarding Claim 1, it is to be noted that in Applicants' device the distribution and pattern are controlled by a combination of the discharge shape, generally non-circular, unlike the prior art, and a generally flat-type deflecting surface. In contrast, the prior art uses a combined deflection surface and nozzle type design wherein the liquid jet is never free, thus involving difficulty in achieving clean, non-circular water patterns. Spray from Applicants' device is interrupted by impacting on the reflector surface, and the flow or spray is free of and does not impact nozzle walls, etc., and contacts a generally flat deflection surface. In contrast, the cited prior art involves continuous deflected flow paths from an area to be sprayed. This involves the production of undesirable heavy side-sprays.

Regarding comment in the Office Action regarding computer utilization in determining geometric relations of parts, etc. known to those versed in the art, Applicants emphasize that the referenced computer utilization is in no way anticipatory of any of Applicants' concept or invention. It is respectfully urged that it is not at all anticipatory of Applicants' concept and invention to utilize a computer to determine details of geometric relations of parts, dimensions, etc.

The present amendment is believed to be fully responsive to the Office Action of October 8, 2003.

All the claims in the application, Claims 1-24, are believed to be allowable and their allowance is respectfully solicited.

The application is believed to be in condition for allowance, and a Notice of Allowance is respectfully solicited.

If a telephone discussion would be helpful in expediting prosecution, it would be appreciated if the Examiner would telephone Applicants' attorney, at (626) 338-0100.

Respectfully submitted,

A handwritten signature in cursive script, reading "Boniard I. Brown".

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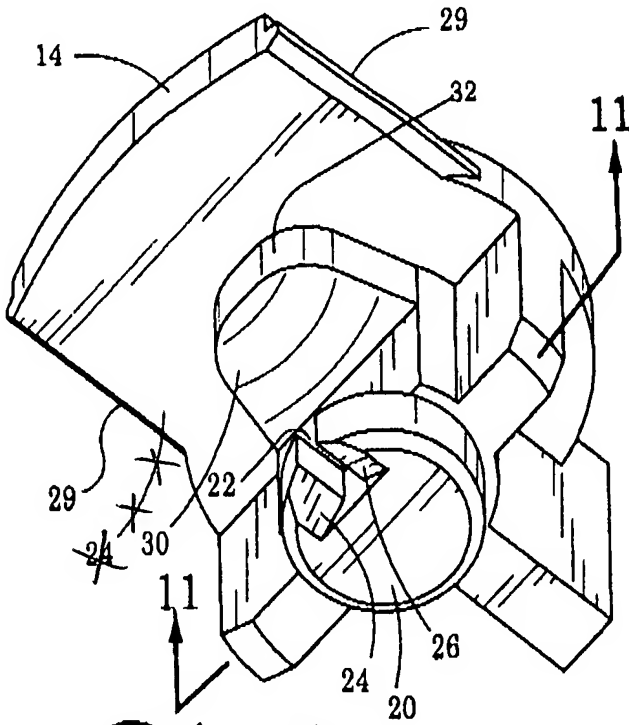


Fig. 10

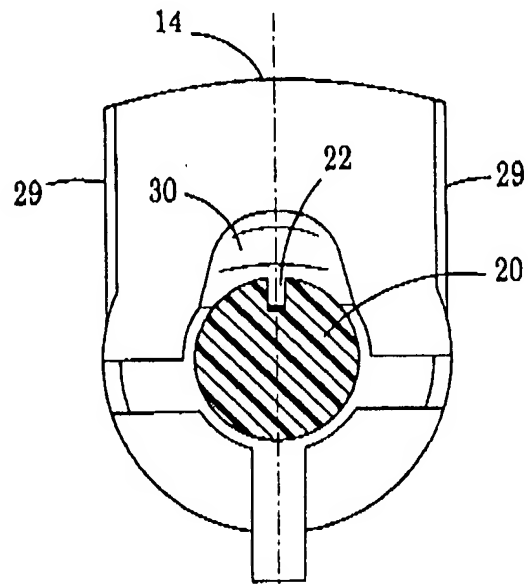


Fig. 11

Fig. 12

